

Please replace the paragraph at page 9, lines 10-17 with the following paragraph  
(marked up version attached in Appendix):

Flex circuit material 33, as well as trace material 118, travels along the underside of actuator arm 20, load beam 24 and gimbal 28. Trace material 118 terminates at terminals 104-114 and terminal pads 122. Typically, a gold bond ball is disposed on each terminal pad 122 and bonded to its respective slider bond pad 38 to act as an electrical conduit and complete the electrical connection between slider 12 and the disc drive. Electrical interconnect lines 63 are embedded in distal beam springs 56 and 58 to route the drive current between the terminals on stator 52 and coil 54 on rotor 50.

REMARKS

This Preliminary Amendment is submitted for entry in the above-identified application prior to an Examiner undertaking a first Action in connection therewith. Corrected drawings for FIGS. 3, 4, and 10 are also included. The specification amendments and the corrected drawings are made to clarify the specification text and do not add new matter to the application.

The Commissioner is authorized to charge any additional fees associated with this paper or credit any overpayment to Deposit Account No. 11-0982.

Respectfully submitted,

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Date:

3/1/02

By:



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CORRECTED  
NOT  
APPROVED  
RST





**APPENDIX:  
MARKED UP VERSION OF SPECIFICATION AND CLAIM AMENDMENTS**

In operation load beam 24, [flex circuit 33] gimbal 28, and microactuator 32 carrying slider 12 are all moved together as coarse positioning is performed by VCM 18 (FIG. 1) moving actuator arm 20 (FIG. 1). To achieve fine positioning of the transducing head, microactuator 32 generates a force which causes bending of beam springs located on the microactuator. As a result, the portion of microactuator 32 carrying slider 12 moves slightly with respect to [flex circuit 33] gimbal 28 in the direction of arrows 40, displacing the transducing head with high resolution for precise positioning of the transducing head over a selected track of the disc.

Rotor 50 has a slider bonding tub 66 on a bottom surface 68 of microactuator frame 46. Slider bonding tub 66 has a tub cap 69 and first and second sidewall 70 and 72. Slider 12 is positioned within slider bonding tub 66. A bottom keeper tub [70] 74 is formed on bottom surface 68 of microactuator frame 46 for receiving bottom keeper 48. Bottom keeper 48 has standoffs [72] 76 for attaching bottom keeper 48 to microactuator frame 46. Standoffs [72] 76 extend upward from a top surface 78 of bottom keeper 48. Although bottom keeper 48 is shown with three standoffs [72] 76, other embodiments of bottom keeper 48 may include any number of standoffs [72] 76. Top keeper 42 has a bottom surface 80. Standoffs 82 extend downward from bottom surface 80 of top keeper 42 to define a channel 84. Standoffs 76 and 82 are preferably formed by etching.

FIG. 8 is a top perspective view of microactuator 32 with flex circuit 33 attached (without gimbal 28) and FIG. 9 is a top perspective view of microactuator 32 showing a trace material 118 (with substrate material of flex circuit 33 removed). Flex circuit 33 is attached to slider 12 (supported by rotor 50) and is also attached to stator 52 adjacent drive terminals 104 and 106, ground terminals 108 and 110, and dummy terminals 112 and 114. The location of the terminals on stator 52 and the attachment of flex circuit 33 (and thereby gimbal 28) to stator 52 further reduces the mass of rotor 50. Prior to attaching microactuator 32 to gimbal 28, flex circuit material 33 is disposed on gimbal 28. Flex circuit[s] 33 consists of copper trace material 118 (shown in FIG. 9) and polyamide substrate material (shown in FIG. [9] 8). Copper trace material 118 forms terminal pads 120 on top of terminals 104-114, and terminal pads 122 adjacent slider bond pads 38 on trailing edge 36 of slider 12. Terminal pads 122 are bond pads for electrical connection to slider 12. Flex circuit 33 is able to move and deflect with rotor 50. Trace material 118 completes a circuit connection between the electrical components of the disc drive, microactuator 32 and slider 12.

Flex circuit material 33, as well as trace material 118, travels along the underside of actuator arm 20, load beam 24 and gimbal 28. Trace material 118 terminates at terminals 104-114 and terminal pads 122. Typically, a gold bond ball is disposed on each terminal pad 122 and bonded to its respective slider bond pad 38 to act as an electrical conduit and complete the electrical connection between slider 12 and the disc drive [(through trace 118 and interconnect lines 63)]. Electrical interconnect lines 63 are embedded in distal beam springs 56 and 58 to route the drive current between the terminals on stator 52 and coil 54 on rotor 50.